

Claims

1. Method for determining the impact of a multicomponent synthetic product mixture on the biological profile of a disease within a group of living systems comprising the steps of:
 - (a) determining a biological profile of the disease by comparing the biological profile of a group of living systems with symptoms of the disease with the biological profile of a reference (or healthy) group of living systems, using a multivariate analysis;
 - (b) determining the impact of a series of samples of one or more synthetic compositions on the biological profile of the disease, in which samples the concentrations of the one or more synthetic compositions differ, using a multivariate analysis;
 - (c) preparing a set of multicomponent synthetic product mixtures which are expected to display a desired impact on the biological profile of the disease on the basis of the information obtained in step (b); and
 - (d) determining the impact of the set of multicomponent mixtures as prepared in step (c) on the biological profile of the disease using multivariate analysis.
2. Method according to claim 1, wherein after step (d) from the set of multicomponent synthetic product mixtures prepared in step (c) one or more mixtures are selected in a step (e), which selected mixtures display the desired impact on the biological profile of the disease.
3. Method according to claim 1 or 2, wherein in step (a) use is made of at least one spectrometric technique, at least one electromigration-based technique or at least one chromatographic technique to determine the profile of the disease.
4. Method according to any one of claims 1-3, wherein in step (b) use is made of at least one spectrometric technique, at least one electromigration-based technique or at least one chromatographic technique to determine the impact of the series of samples of the multicomponent mixture on the biological profile of the disease samples.

5. Method according to any one of claims 2-4, wherein in step (d) use is made of at least one spectrometric technique, at least one electromigration-based technique or at least one chromatographic technique to determine the composition of the samples.

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6. Method according to any one of claims 2-5, wherein use is made of two or more spectrometric techniques or electromigration-based techniques.

10 7. Method according to claim 6, wherein use is made of at least a nuclear magnetic resonance technique and a mass spectrometry technique or electromigration-based technique.

8. Method according to any one of claims 1-7, wherein the biological profile includes one or more metabolic, genetic and/or proteomic profiles.

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9. Method according to claim 8, wherein the biological profile includes the metabolic, genetic and proteomic profiles.

20 10. Method according to any one of claims 1-9, wherein the multicomponent mixture comprises chemical product.

11. Method according to any one of claims 1-10, wherein in step (a) the biological profiles are determined of at least one type of bodyfluid.

25 12. Method according to any one of claims 1-11, wherein in step (a) the biological profiles are determined of at least one type of tissue.

13. Method according to claim 12, wherein in step (a) the biological profiles are determined of at least two different types of bodyfluid.

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14. Method according to any one of claims 1-1, wherein in step (a) the biological profiles are determined using one or more of the following biomarkers; genes, transcripts, proteins, metabolites and (trace) elements.

15. Method according to any one of claims 1-1, wherein the number of samples in step (b) is at least 2.

5 16. Method according to claim 15, wherein the number of samples in step (c) ranges from 5-100.

17. Use of a multicomponent synthetic product mixture as prepared in step (c) as defined in any one of claims 1-16 for preparing a synthetic product-based medicament.

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18. Use of a multicomponent synthetic product mixture as selected in step (e) as defined in any one of claims 2-16 for preparing a synthetic product-based medicament.

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19. Medicament comprising a multicomponent synthetic product mixture as prepared in step (c) as defined in any one of claims 1-16 or as selected in step (e) as defined in any one of claims 2-16.

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20. Method for controlling the composition of a multicomponent mixture as selected in step (e) as defined in any one of claims 2-16, wherein the concentrations of one or more compositions contained in the mixture are adjusted to ensure that the one or more compositions contained in the mixture have an impact on a biological profile of the disease.

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